

# AC965 Series

Nonincendive, Intrinsically Safe, IECEx and KC Zone 0,1 Approved Accelerometer, Top Exit 2 Pin Connector, 100 mV/g, ±10%



VIBRATION ANALYSIS HARDWARE



## Regulatory Information

Ex ia IIC T3/T4	Ui = 28 Vdc Ii = 100 mA
AEx ia IIC T3/T4	CSA 221421
CL I Groups A, B, C, D	
CL II Groups F, G	IECEx CSA 07.0001
CL III	Ex ia IIC T3
	Ex ia IIC T4
Operating Temperature Code: T4	Ex ia I Ma
Ambient Temperature Range = -40 to 80°C	ANZEx 18.4160
Operating Temperature Code: T3	
Ambient Temperature Range = -40 to 125°C	

### AC965-1A

2 Pin Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common

### AC965-2C

CB193 Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

**Built To Order**

### AC965-3C

CB296 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire

**Built To Order**

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	AC965	M/ or M8/AC965	<b>Environmental</b>		
Sensitivity (±10%)	100 mV/g		Operating Temperature Range	-40 to 250 °F	-40 to 121 °C
Frequency Response (±3dB)	30-900,000 CPM	0.5-15000 Hz	Maximum Shock Protection	5,000 g, peak	
Dynamic Range	± 50 g, peak		Electromagnetic Sensitivity	CE	
<b>Electrical</b>			Sealing	Welded, Hermetic	
Settling Time	<3 Seconds		<b>Physical</b>		
Voltage Source	18-28 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	30 µg/√Hz		Weight	3.2 oz	91 grams
Spectral Noise @ 100 Hz	19 µg/√Hz		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	15 µg/√Hz		Mounting Thread	1/4-28 Blind Tapped Hole	
Output Impedance	<100 ohm		Connector (Non-Integral)	2 Pin MIL-C-5015	
Bias Output Voltage	10-14 VDC		Resonant Frequency	1,380,000 CPM	23000 Hz
Case Isolation	>10 <sup>9</sup> ohm		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

## Typical Frequency Response

